IOWA DEPARTMENT OF NATURAL RESOURCES ADMINISTRATIVE CONSENT ORDER

IN THE MATTER OF:

LINCOLNWAY ENERGY, LLC

Story County, Iowa

ADMINISTRATIVE CONSENT ORDER NO. 2012-AQ- 30

TO: Dave Sommerlot, Plant Manager

Lincolnway Energy, LLC 5911 West Lincoln Highway Nevada, Iowa 50201 Jay Eaton 700 Walnut Street, Suite 1000 Des Moines, Iowa 50309

I. SUMMARY

This administrative consent order is entered into between Lincolnway Energy, LLC (Lincolnway) and the Iowa Department of Natural Resources (DNR) for the purpose of resolving air quality permitting violations. The parties have agreed to the provisions below.

Questions regarding this administrative consent order should be directed to:

Relating to technical requirements:

Bryan Bunton
Iowa Department of Natural Resources
7900 Hickman Road, Suite 1
Windsor Heights, Iowa 50324
Phone: 515/281-0363

Relating to legal requirements:

Kelli Book, Attorney for the DNR Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, Iowa 50324 Phone: 515/281-8563

Payment of penalty to:

Director of the Iowa DNR Wallace State Office Building 502 East Ninth Street Des Moines, Iowa 50319-0034

II. JURISDICTION

This administrative consent order is issued pursuant to the provisions of Iowa Code sections 455B.134(9) and 455B.138(1) which authorize the Director to issue any order necessary to secure compliance with or prevent a violation of Iowa Code chapter 455B, Division II (air quality), and the rules promulgated or permits issued pursuant to that part; and Iowa Code section 455B.109 and 567 Iowa Administrative

Code (IAC) chapter 10, which authorize the Director to assess administrative penalties.

III. STATEMENT OF FACTS

- 1. Lincolnway is an ethanol production facility with the capacity to produce 62 million gallons of ethanol per year. In addition to ethanol, Lincolnway has the capacity to produce 210,150 tons of distillers dried grains (DDGS) per year and 51,482 tons of wet cake per year.
- 2. Lincolnway neither admits nor denies the alleged violations and conclusions of law stated in this administrative consent order.

Stack Test Violations:

- 3. On March 20, 2006, DNR issued Lincolnway a modified permit for EP S40 (Permit #05-A-081-S1). Condition 12 of the construction permit included an acetaldehyde emission limit of 9.4 tons per year for a single Hazardous Air Pollutant (HAP) or 24.4 tons per year for total HAPS.
- 4. On May 26 and June 16, 2011, Lincolnway conducted the required stack test for EP S40. The acetaldehyde emissions for EP S40 tested above the permitted acetaldehyde limit of 1.36 lb/hr; the tested average was 3.66 lb/hr. On September 7, 2011, DNR issued a Notice of Violation letter to Lincolnway for the emissions violation demonstrated during the May and June 2011 stack tests.
- 5. On July 8, 2011, DNR issued Lincolnway a modified permit for EP S40 (Permit #05-A-081-S2). Condition 10 of the construction permit included an acetaldehyde emission limit of 1.44 lb/hr, an acrolein emission limit of 0.03 lb/hr, and a volatile organic compound (VOC) emission limit of 5.00 lb/hr. Condition 12 of the construction permit required acetaldehyde and VOC stack testing on a quarterly basis. The permit allowed for the facility to request a reduction or elimination of the subsequent testing requirement when the facility completed four consecutive quarterly tests demonstrating compliance with the emission limits.
- 6. On December 13-15, 2011, Lincolnway conducted the required quarterly stack test for EP S40. Lincolnway tested EP S40 under two conditions during the test. During the Condition 1 testing, the acetaldehyde emissions for EP S40 tested above the permitted acetaldehyde limit of 1.44 lb/hr; the tested average was 2.16 lb/hr. The VOC emissions tested above the permitted limit of 5.00 lb/hr; the tested average was 8.92 lb/hr. During the Condition 2 testing, the VOC emissions tested above the permitted limit of 5.00 lb/hr; the tested average was 6.28 lb/hr. On May 14, 2012, DNR issued a Notice of Violation letter for the emission violations that occurred during the December 2011 test.

- 7. On March 6-8, 2012, Lincolnway conducted the required quarterly stack test for EP S40. The VOC emissions tested above the permitted limit of 5.00 lb/hr; the tested average was 48.1 lb/hr. On May 29, 2012, DNR issued a Notice of Violation letter for the emission violation that occurred during the March 2012 test.
- 8. On June 12-19, 2012, Lincolnway conducted the required quarterly stack test for EP S40. The acrolein emissions tested above the permitted limit of 0.03 lb/hr; the tested average was 0.082 lb/hr. On August 22, 2012, DNR issued a Notice of Violation letter for the emission violation that occurred during the June 2012 tests.
- 9. Lincolnway states that it took steps to maintain VOC emission compliance of EP S40 during 2011 and 2012, including trouble-shooting, cleaning during shut down and locating and repairing a malfunctioning valve.

Continuous Emission Monitoring Violations

- 10. Condition 16 of Air Quality Construction Permit #05-A-097-S2 for EP S10 requires continuous emission monitoring (CEMs) for nitrogen oxides (NO_x), sulfur dioxide (SO_2), carbon monoxide (CO), and opacity.
- 11. The 2010 4^{th} quarter excess emissions report for EP S10 showed that the NO_x CEMS was unavailable 14% of the time; the SO_2 CEMS was unavailable 13% of the time; and the CO CEMS was unavailable 9.6%. On January 21, 2011, DNR issued a Notice of Violation letter to Lincolnway for the excessive CEMS unavailability during the quarter.
- The 2011 2^{nd} quarter excess emissions report for EP S10 showed that NO_x CEMS was unavailable 16% of the time; the SO_2 CEMS was unavailable 18.6% of the time; and the CO CEMS was unavailable 22.4% of the time. On August 24, 2011, DNR issued a Notice of Violation letter to Lincolnway for the excessive CEMS unavailability during the quarter.
- 13. The 2011 3^{rd} quarter excess emissions report for EP S10 showed that the NO_x CEMS was unavailable 9.6% of the time; the SO₂ CEMS was unavailable 12.1% of the time; and the CO CEMS was unavailable 5.6% of the time.
- 14. The 2011 4th quarter excess emissions report for EP S10 showed that the NO $_{\rm x}$ CEMS was unavailable 8.6% of the time and the SO $_{\rm 2}$ CEMS was unavailable 24.5% of the time. On February 17, 2012, DNR issued a Notice of Violation letter to Lincolnway for the excessive CEMS unavailability during the quarter.
- 15. The 2012 1st quarter excess emissions report for EP S10 showed that the NO $_{\rm x}$ CEMS was unavailable 7.4 % of the time; the SO $_{\rm 2}$ CEMS was unavailable 9.6% of the time; and the CO CEMS was unavailable 6.6% of the time. On May 23,

2012, DNR issued a Notice of Violation letter to Lincolnway for the excessive CEMS unavailability during the quarter.

- 16. On June 27, 2012, during a meeting with the DNR, Lincolnway representatives explained that the facility had placed a new CEMS unit into operation in an effort to reduce downtime. In a letter dated August 13, 2012 to the DNR, Lincolnway stated that since June 9, 2012, the CEMS had 100% availability.
- 17. Lincolnway states during 2010 it took steps to maintain CEMs compliance, including switching CEMs vendor, upgrading the sample cooling system to double moisture removal, adding an ammonia scrubber upstream of the umbilical line, installing a stack flow meter and upgrading the data acquisition system to allow reporting in lbs/hr and increase tracking abilities, at a cost of \$96,000. Lincolnway continued its CEMs troubleshooting and improvements in 2011 and in 2012, including installing a dilution system to eliminate moisture and ammonia salts and improve CEMs availability, at a cost of \$99,000.

Compliance Testing Violations

- 18. Condition 12 of the construction permit for EP S40 required that emission testing for particulate matter (PM) and particulate matter with aerodynamic diameter equal to or less than 10 microns (PM $_{10}$) to be completed at least once per calendar year. A review of the DNR's stack testing records indicates that Lincolnway failed to conduct a compliance test for pollutants in 2010.
- 19. Condition 12 of the construction permit for EP S90 (DDGS Loadout) required that emission testing for PM, PM₁₀, and opacity be completed on a quarterly basis. A review of the DNR's stack testing records indicates that Lincolnway failed to conduct compliance testing for these pollutants during the 3rd and 4th quarters of 2011 and the 1st quarter of 2012. On May 14, 2012, a Notice of Violation letter was issued to Lincolnway for the failure to conduct the compliance testing.

IV. CONCLUSIONS OF LAW

- 1. Iowa Code section 455B.133 provides that the Environmental Protection Commission (Commission) shall establish rules governing the quality of air and emission standards. The Commission has adopted 567 IAC chapters 20-35 relating to air quality.
- 2. 567 IAC 22.3(3) states a permit may be issued subject to conditions which shall be specified in writing. Such conditions may include but are not limited to emission limits, operating conditions, fuel specifications, compliance testing, continuous monitoring, and excess emission reporting. Air quality construction permits contain operating and emission limits. The construction permit can also require testing to demonstrate compliance with the limits established in the permit. Lincolnway has violated conditions of its construction permits numerous times as

stated above. Lincolnway has failed to demonstrate compliance with the emission limits on at least four occasions. Lincolnway has failed to operate the CEMS as required for at least five quarters. Lincolnway has failed to conduct compliance testing on at least four occasions. The above-mentioned facts indicate several violations of this provision.

V. ORDER

THEREFORE, the DNR orders and Lincolnway agrees to the following:

- 1. Lincolnway shall submit a written compliance plan to DNR Air Quality Bureau within 30 days of the date the Director signs this administrative consent order. The compliance plan shall address the emission limits violations for EP S40 and provide a detailed plan on how the facility will demonstrate and continue to demonstrate compliance with the emission limits in the construction permit for EP S40; and
- 2. Lincolnway shall pay a penalty in the amount of \$10,000.00 within 30 days of the date the Director signs this administrative consent order.

VI. PENALTY

- 1. Iowa Code section 455B.146 authorizes the assessment of civil penalties of up to \$10,000.00 per day of violation for each of the air quality violations involved in this matter.
- 2. Iowa Code section 455B.109 authorizes the Commission to establish by rule a schedule of civil penalties up to \$10,000.00, which may be assessed administratively. The Commission has adopted this schedule with procedures and criteria for assessment of penalties in 567 IAC chapter 10. Pursuant to these rules, the DNR has determined that the most effective and efficient means of addressing the above-cited violations is the issuance of an administrative consent order with an administrative penalty. The administrative penalty assessed by this administrative consent order is \$10,000.00. The administrative penalty is determined as follows:

Economic Benefit – 567 IAC chapter 10 requires that the DNR consider the costs saved or likely to be saved by noncompliance. 567 IAC 10.2(1) states that "where the violator received an economic benefit through the violation or by not taking timely compliance or corrective measures, the department shall take enforcement action which includes penalties which at least offset the economic benefit." 567 IAC 10.2(1) further states, "reasonable estimates of economic benefit should be made where clear data is not available. Lincolnway has gained an economic benefit by failing to demonstrate compliance with the permitted emission limits and has avoided the costs associated with compliance testing on at least four occasions. Additionally, it delayed the cost of the CEMS monitoring. For these reasons, \$1,000.00 is being assessed for this factor.

Gravity of the Violation – One of the factors to be considered in determining the gravity of a violation is the amount of penalty authorized by the Iowa Code for that type of violation. As indicated above, substantial civil penalties are authorized by statute. Despite the high penalties authorized, the DNR has decided to handle the violations administratively at this time, as the most equitable and efficient means of resolving the matter. Failure to demonstrate compliance with the emission limits for the permit for EP S40 has likely caused actual harm to the environment. The emission limits were established to protect the environment. Acetaldehyde and acrolein are toxic air pollutants and the gravity of the violation is higher when a toxic pollutant is involved. Additionally, the CEMS is a tool in which the DNR can monitor compliance at the facility. The excessive downtown of the CEMS resulted in the DNR not being able to sufficiently monitor the emissions at the facility. The violations threaten the integrity of the air quality construction permit and air pollution control programs. For these reasons, \$3,000.00 is being assessed for the stack testing violations described in Section III, Paragraphs 2-7; \$3,000.00 is being assessed for the CEMS violations described in Section III, Paragraph 8-14; and

\$2,000.00 is being assessed for the compliance testing violations described in Section III, Paragraph 15-16. Therefore, a total of \$8,000.00 is being assessed for this factor.

<u>Culpability</u> – Lincolnway has a duty to remain knowledgeable of DNR's requirements and to be alert to the probability that its conduct is subject to DNR's rules. For these reasons, \$1,000.00 is assessed for this factor.

VII. WAIVER OF APPEAL RIGHTS

This administrative consent order is entered into knowingly by and with the consent of Lincolnway. For that reason, Lincolnway waives the right to appeal this administrative consent order or any part thereof.

VIII. NONCOMPLIANCE

Compliance with Section V of this administrative consent order constitutes full satisfaction of all requirements pertaining to the violations described in this administrative consent order and of all violations arising out of the same facts and circumstances which were known to the State of Iowa or were reasonably ascertainable from information in the state's possession as of the date of this administrative consent order. Failure to comply with this administrative consent order may result in the imposition of administrative penalties pursuant to an administrative order or referral to the Attorney General to obtain injunctive relief and civil penalties pursuant to Iowa Code section 455B.146.

CHUCK GIPP, DIRECTOR	Dated this day of
Iowa Department of Natural Resources	
LINGOLNWAY ENERGY, LLC	Dated this 9 th day of

Air Quality Bureau (#85-02-017); Kelli Book; Bryan Bunton; DNR Field Office 5; EPA; VII.A.2 and VII.B.2.c